**Research News** 

# NITROGEN FOR SUGARCANE OILCAKE AND AMMONIUM SULPHATE MIXTURE BETTER

Better results can be had from the sugarcane crop if it is given nitrogen in both organic and inorganic forms, rather than the inorganic form (as ammonium sulphate) alone, research at Coimbatore in Madras State shows.

In the State, a high dose of 200 to 250 pounds of nitrogen is recommended for sugarcane. Of this, it is pointed out, one third is to be supplied in the organic form such as an oilseed cake like groundnut cake, and the rest as a fertilizer like ammonium sulphate.

This is to be applied in two doses. The first dose comprising 500 pounds of groundnut cake and 325 pounds of ammonium sulphate is to be applied 75 to 80 days after planting, and a second similar dose to be applied 125 to 140 days after planting.

The crop should, in addition to nitrogen, also receive phosphate and potash to give the best yield. Normally, 60 pounds of phosphoric acid and 80 pounds of potassium is the dose advised. This is to be supplied at the time of planting sugarcane.

#### DIBBLING COTTON ON RIDGES

### **Better Sowing Method**

As in the other areas, dibbling cotton seed on ridges is the better method of sowing cotton in the Tungabhadra Project area under light irrigation, it is found.

The customary practice in this area is to sow cotton with country drills having 'draw tube' attachments. This way, the seed is unevenly distributed in the furrow, causing wide gaps in the crop, leading to a poor yield.

The better method would be to prepare ridges nine to ten inches high a week prior to sowing, and to dibble the seed on these ridges.

Experiments at the Dhade Sugar Research Station (Mysore State) showed that the dibbling of seeds directly on the ridges increased the germination percentage, and gave a good stand of the crop. The plants were taller, and put out a greater number of nodes and bolls.

## WILT—RESISTANT CORIANDER Will Benefit Madhya Pradesh Farmers

Wilt, the disease which used to damage the coriander crop in Madhya Pradesh, can do no harm to the new coriander variety evolved at Gwalior.

The new variety is simply named No. 5365. It is small seeded (liked by the trade), and matures in 110 days. Apart from resisting the wilt disease, it gives a high yield of 12 to 15 maunds of seed per acre.

The variety can be grown well under dry or unirrigated conditions.

Seeds of the new variety are being made available to farmers by the Assistant Economic Botanist, Agricultural Research Institute, Gwalior, Madhya Pradesh.

## VIGOROUS ARECA SEEDLINGS New Nursery Practices

Farmers are now getting better and stronger arecanut seedlings for planting by following practices proved best by research.

Research has shown that selected heavy seed-nuts should be sown in nurseries in a horizontal or vertical position (with the stalk end just exposed), one inch apart for sprouting.

The sprouted nuts should then be planted 15 inches apart. In  $1\frac{1}{2}$ years they grow into vigorous seedlings with a good girth and five leaves and a spindle, and a welldeveloped root system.

Good irrigation is necessary during the drier months for the sprouting and growth of the seedlings, and so is shade.

For shade, bananas should be interplanted at wide distance. If gliricidia or giant hemp is chosen as plant for shade, a closer spacing should be given.

Manuring can be taken up only if the seedlings are found to be slow in growth.

## FERTILIZER FOR COTTON

## **Profits Go Up**

Recent trials in Madras State show that the cotton being grown in rice fallows brings better profits if given fertilizer.

In trials, it was seen that without fertilizer, the crop yielded 1,030 pounds of *kapas*. A crop given 375 pounds of ammonium sulphate per acre, it was seen, gave an extra 536 pounds of *kapas*.

Farmers should apply half the dose of ammonium sulphate when the crop is 20 to 25 days old, and the remaining half when it is 60 days old.

The fertilizer should be applied as close to the root zone as possible, taking care to see that it does not fail on any part of the plant.

The crop should be irrigated immediately after the fertilizer is applied.

## **RED HAIRY CATERPILIAR**

## **Bad Pest of Groundnut**

The red hairy caterpillar, which did a great deal of damage to the groundnut crop in the South last year, can be brought down with just two dustings of BHC, experts point out.

The first dusting with ten per cent BHC should be done as soon as the young (just hatched out) caterpillars are seen on the crop. The dusting should be done not only on the crop, but also on field bunds and on weeds growing round the fields.

A second dusting should follow after a fortnight when the next batch of the caterpillars come out.

For each dusting, about 30 pounds of the chemical will be required per acre.

Control will be difficult and costly if timely action is not taken by farmers and the caterpillars allowed to grow.

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